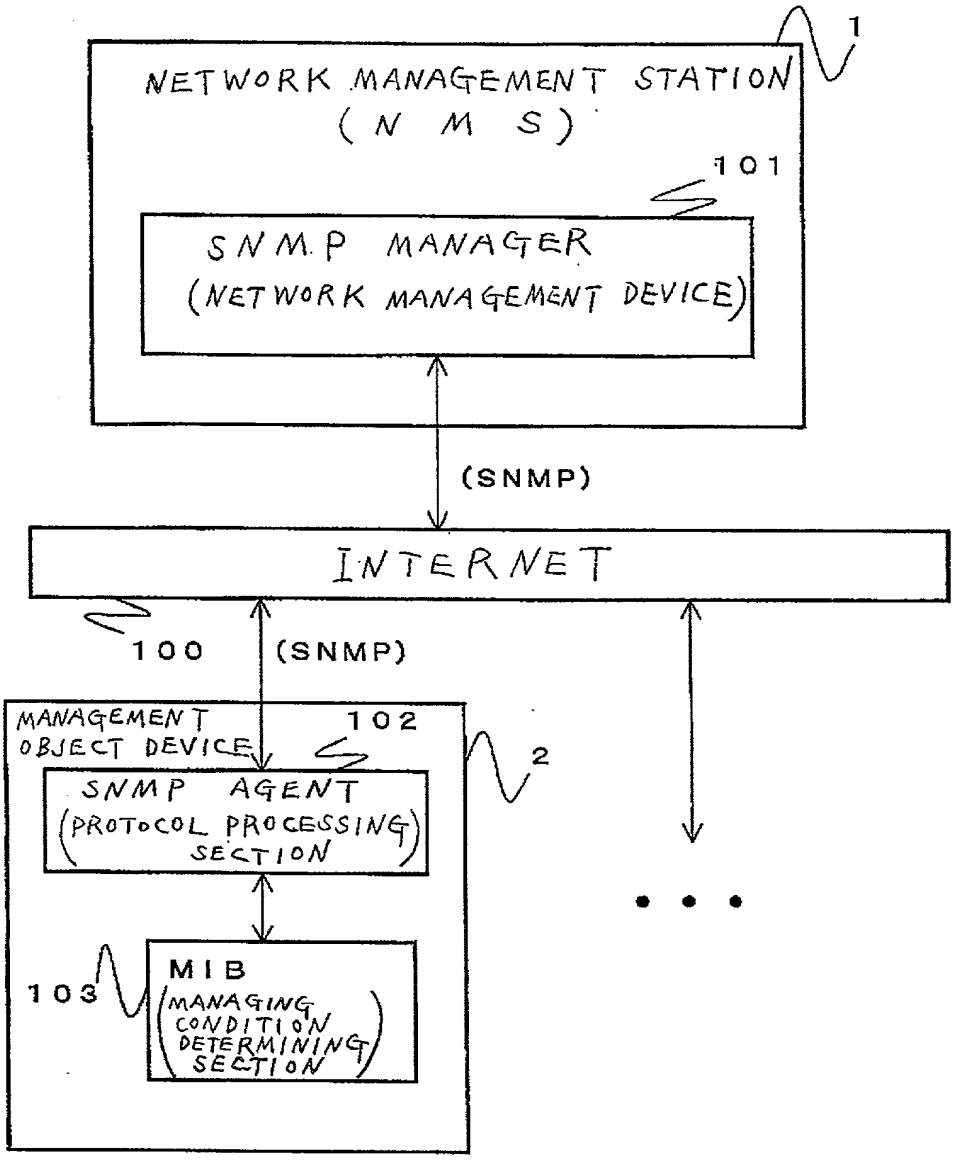
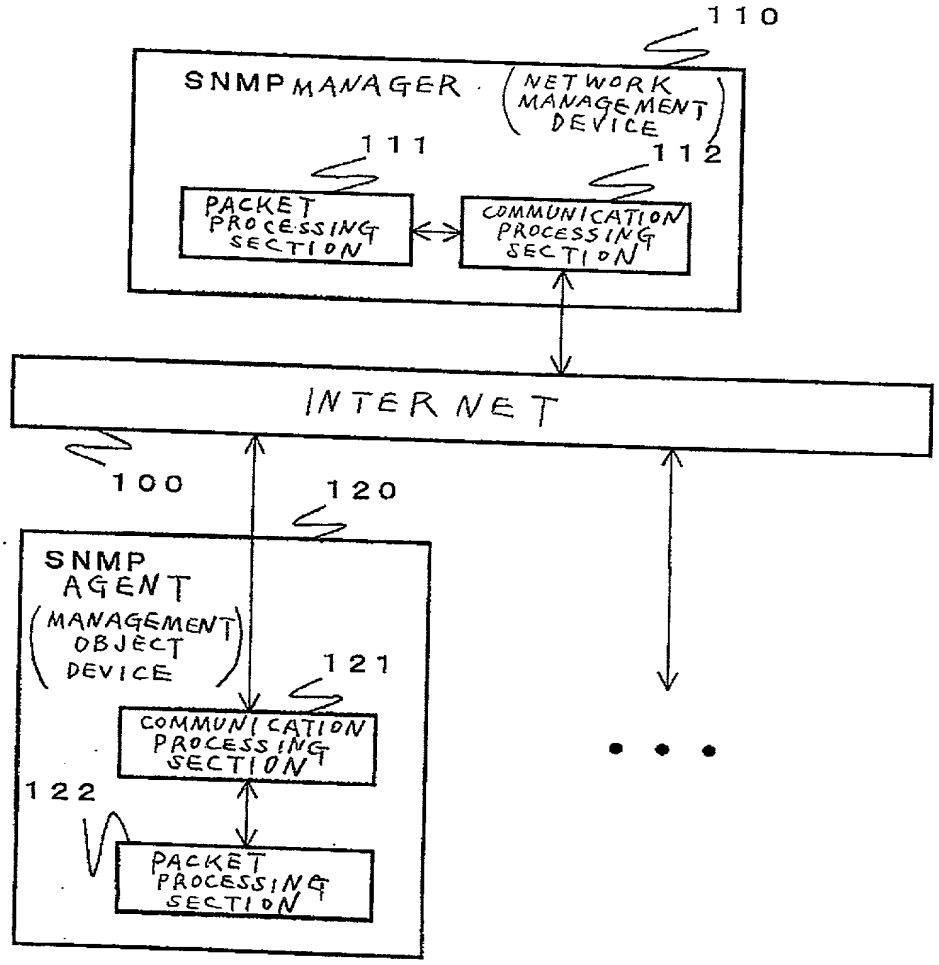


PRIOR ART

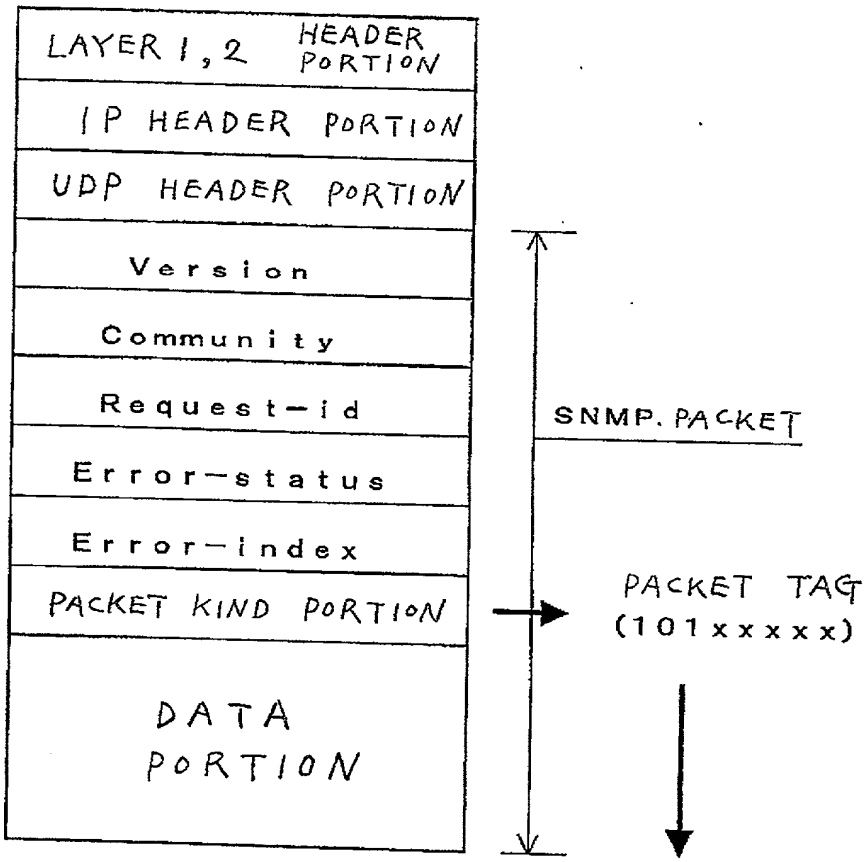
FIG 1



PRIOR ART

FIG 2

TRANSFER PACKET



KIND OF PACKET	87654321
Get-request:	10100000
Get-next-request:	10100001
Get-response:	10100010
Set-request:	10100011
Trap:	10100100

PRIOR ART

FIG 3

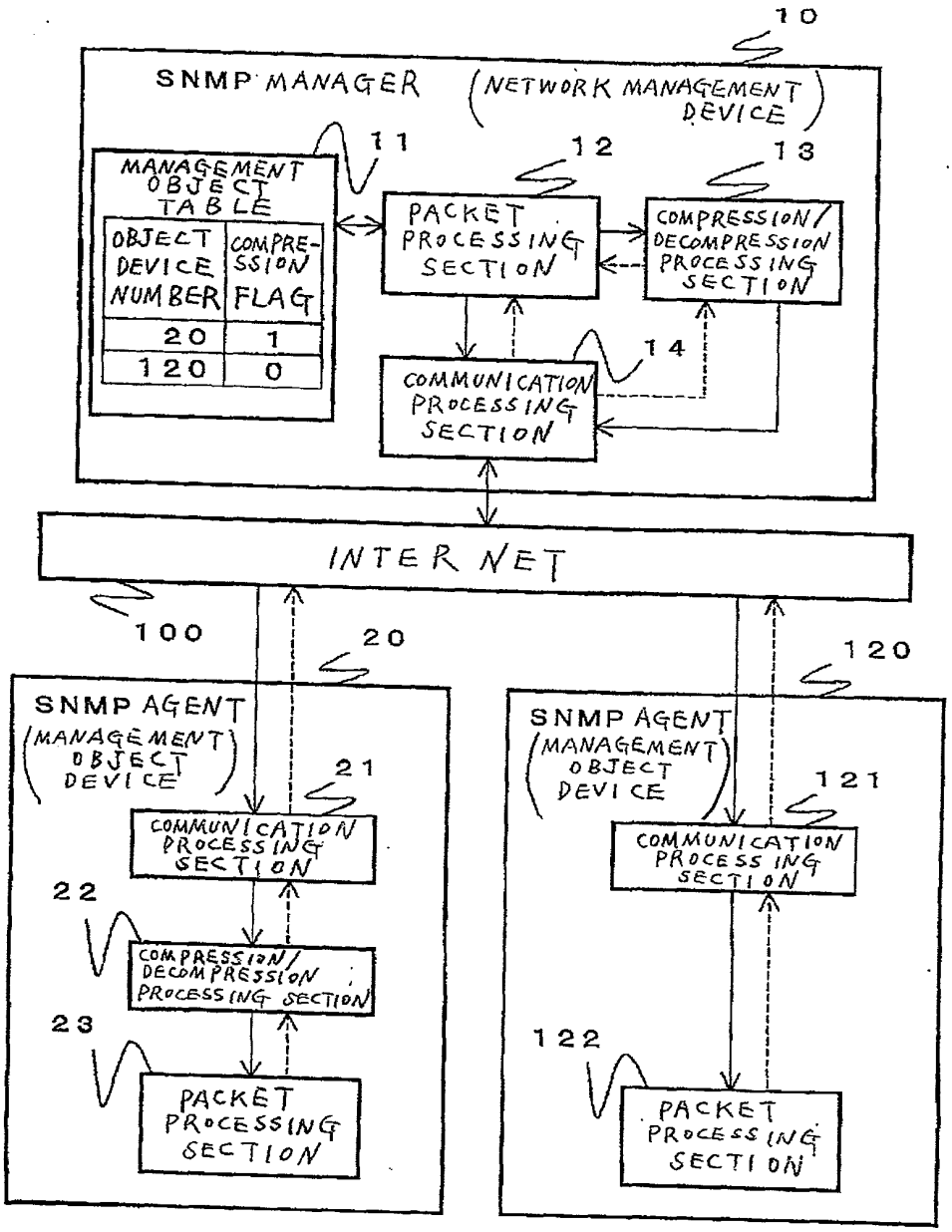
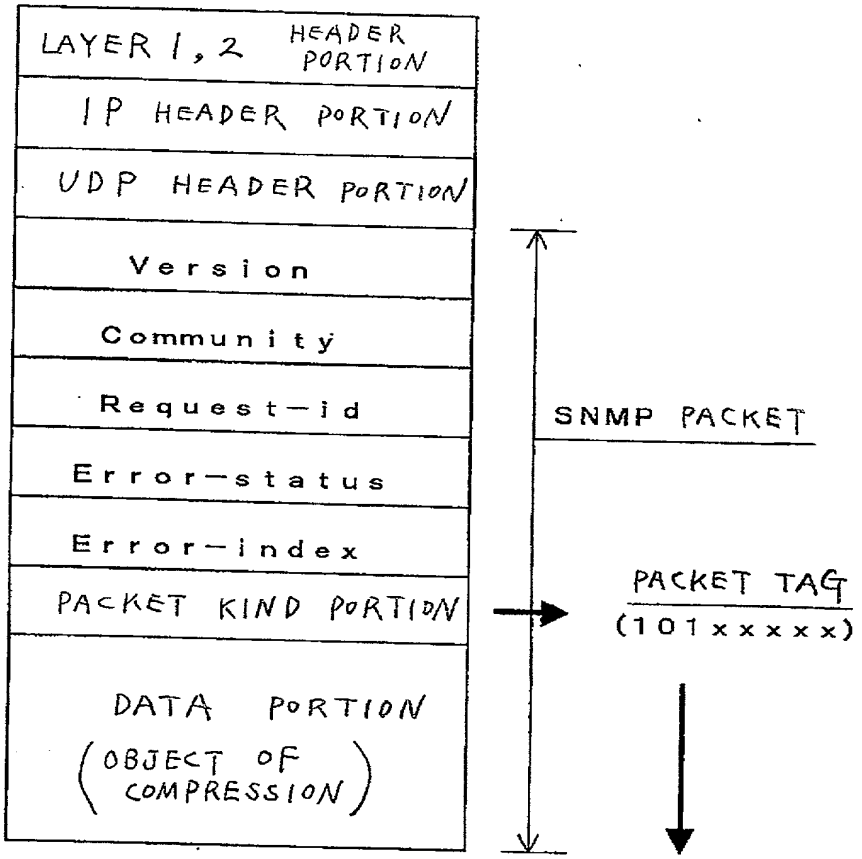

10
SNMP MANAGER (NETWORK MANAGEMENT DEVICE)
11
MANAGEMENT OBJECT TABLE
OBJECT DEVICE NUMBER
COMPRESSION FLAG
20
1
120
0
12
PACKET PROCESSING SECTION
13
COMPRESSION/DECOMPRESSION PROCESSING SECTION
14
COMMUNICATION PROCESSING SECTION
INTERNET
100
20
SNMP AGENT (MANAGEMENT OBJECT DEVICE)
21
COMMUNICATION PROCESSING SECTION
22
COMPRESSION/DECOMPRESSION PROCESSING SECTION
23
PACKET PROCESSING SECTION
120
SNMP AGENT (MANAGEMENT OBJECT DEVICE)
121
COMMUNICATION PROCESSING SECTION
122
PACKET PROCESSING SECTION

FIG 4

TRANSFER PACKET



KIND OF PACKET	87654321
Get-request:	10100000
Get-next-request:	10100001
Get-response:	10100010
Set-request:	10100011
Trap:	10100100
Compressed-Get-request:	10110000
Compressed-Get-next-request:	10110001
Compressed-Get-response:	10110010
Compressed-Set-request:	10110011
Compressed-Trap:	10110100

FIG 5

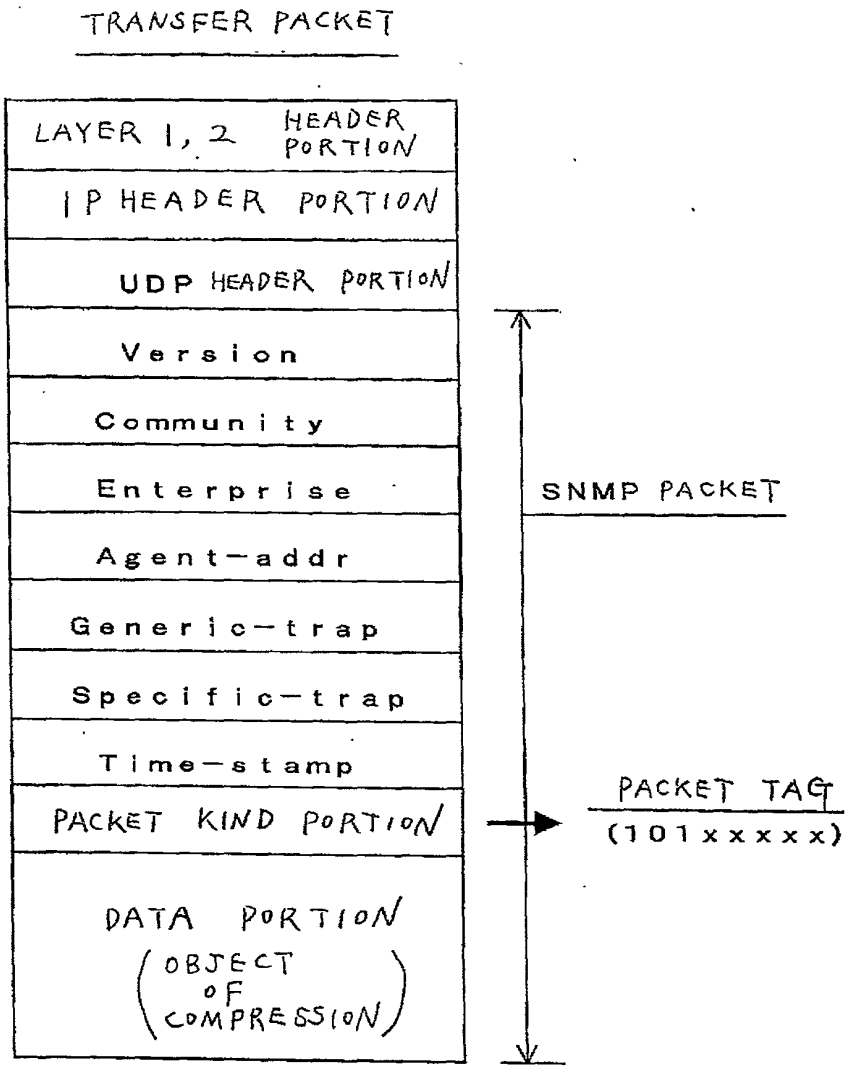

TRANSFER PACKET
LAYER 1, 2 HEADER PORTION
IP HEADER PORTION
UDP HEADER PORTION
Version
Community
Enterprise
Agent-addr
Generic-trap
Specific-trap
Time-stamp
PACKET KIND PORTION
DATA PORTION
(OBJECT OF COMPRESSION)
SNMP PACKET
PACKET TAG
(101xxxxx)

FIG 6

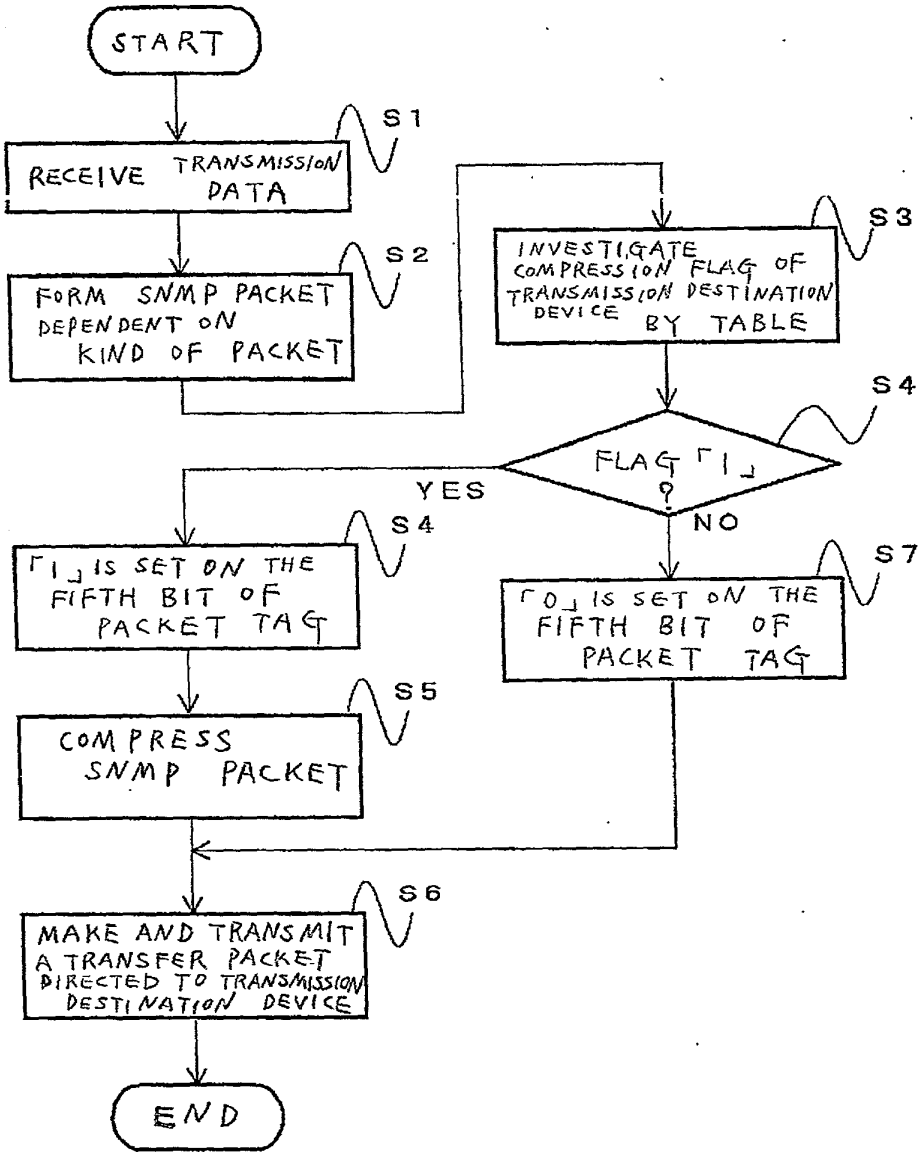

START
S1
RECEIVE TRANSMISSION DATA
S2
FORM SNMP PACKET DEPENDENT ON KIND OF PACKET
S3
INVESTIGATE COMPRESSION FLAG OF TRANSMISSION DESTINATION DEVICE BY TABLE
S4
FLAG 「1」 ?
YES
NO
S4
「1」 IS SET ON THE FIFTH BIT OF PACKET TAG
S7
「0」 IS SET ON THE FIFTH BIT OF PACKET TAG
S5
COMPRESS SNMP PACKET
S6
MAKE AND TRANSMIT A TRANSFER PACKET DIRECTED TO TRANSMISSION DESTINATION DEVICE
END

FIG 7

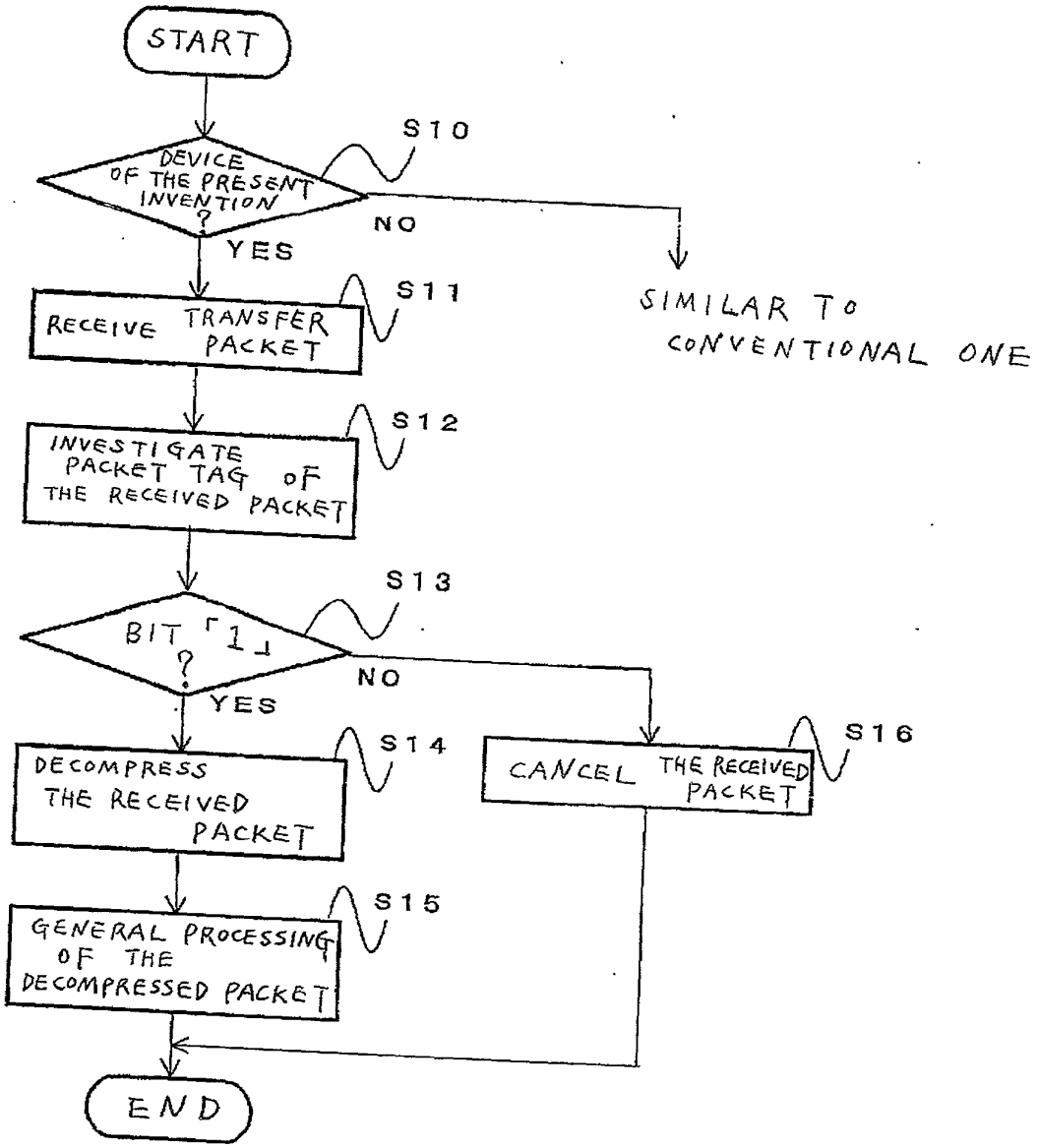

START
DEVICE OF THE PRESENT INVENTION ?
S10
NO
YES
SIMILAR TO CONVENTIONAL ONE
RECEIVE TRANSFER PACKET
S11
INVESTIGATE PACKET TAG OF THE RECEIVED PACKET
S12
BIT 「1」 ?
S13
NO
YES
DECOMPRESS THE RECEIVED PACKET
S14
CANCEL THE RECEIVED PACKET
S16
GENERAL PROCESSING OF THE DECOMPRESSED PACKET
S15
END

FIG 8

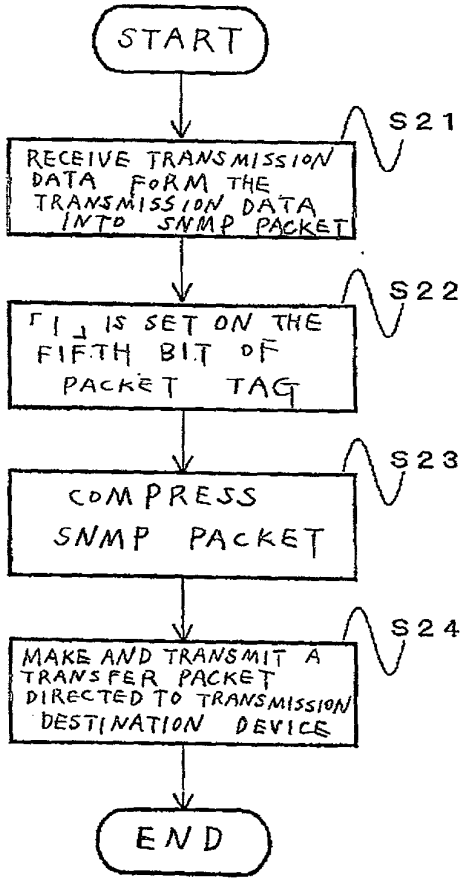

START
S21
RECEIVE TRANSMISSION DATA FORM THE TRANSMISSION DATA INTO SNMP PACKET
S22
"1" IS SET ON THE FIFTH BIT OF PACKET TAG
S23
COMPRESS SNMP PACKET
S24
MAKE AND TRANSMIT A TRANSFER PACKET DIRECTED TO TRANSMISSION DESTINATION DEVICE
END

FIG 9

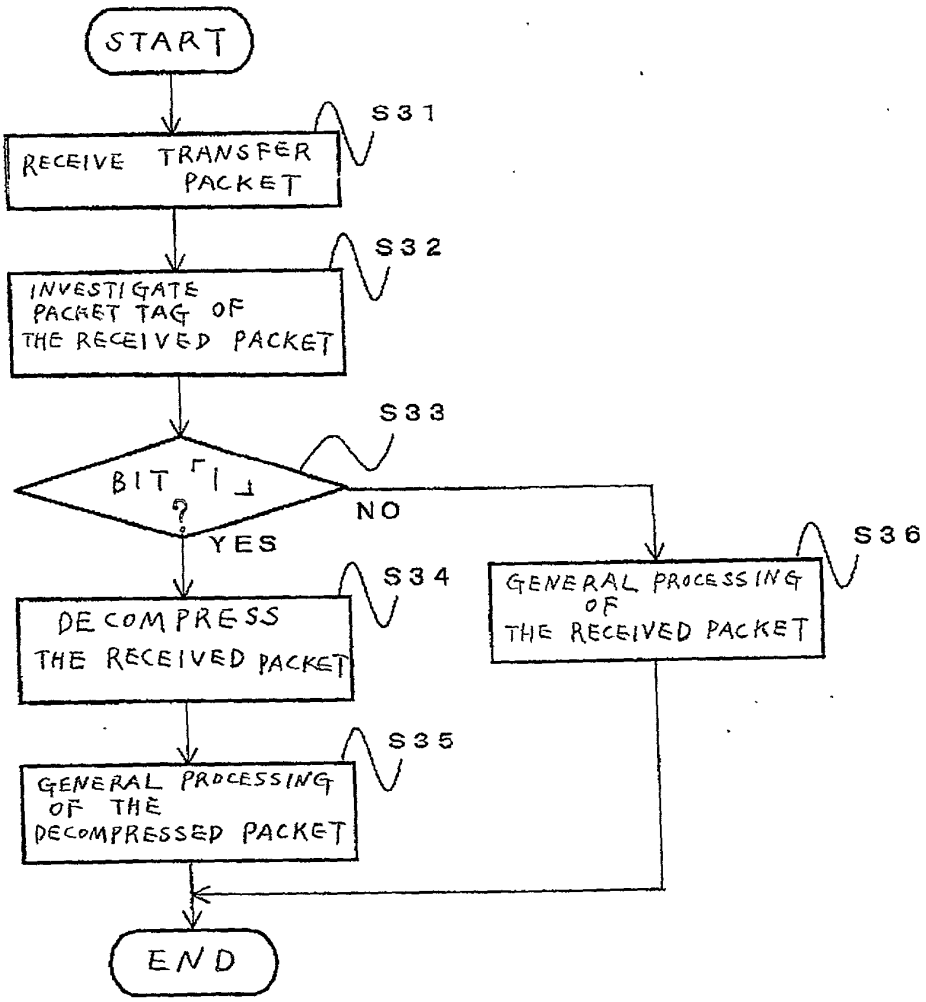

START
S31
RECEIVE TRANSFER PACKET
S32
INVESTIGATE PACKET TAG OF THE RECEIVED PACKET
S33
BIT "1" ?
NO
YES
S34
DECOMPRESS THE RECEIVED PACKET
S35
GENERAL PROCESSING OF THE DECOMPRESSED PACKET
S36
GENERAL PROCESSING OF THE RECEIVED PACKET
END

FIG 10